

## 24. LARGE STONE IN STOMACH OF CROCODILE

I am sending you a fairly large stone weighing 5 lb. 8 oz. (220 tolas) which was found in the empty stomach of a 10 ft.-3 ins. crocodile I recently shot at Jadsan.

Though pebbles, small stones and other hard substances are commonly found in the maws of crocodiles I have never so far found such a large stone though I have examined over a hundred stomachs.

DIL BAHAR,

BHAVNAGAR,

January 21, 1952.

K. S. DHARMAKUMARSINHJI

[As has been remarked by the editors previously (Vol. 30, 703) the stones and pebbles are presumably swallowed as an aid to digestion, but we cannot trace any record of one as large as this taken from a crocodile before.—EDS.]

25. LOCALIZATION OF THE STRIPED VARIETY OF THE  
ROUGH TAILED EARTHSNAKE—*UROPELTIS*  
*MACROLEPIS* (PETERS)—TO  
MAHABLESHWAR

An earth-snake recently collected at Mahableshwar (4,000 ft., Western Ghats) agrees with *Uropeltis macrolepis* (Peters) except that the sub-caudals are 13 in number instead of 7 to 10 (Malcolm Smith's Fauna, Vol. III, p. 79) though Wall in 'The Handlist of the Snakes of the Indian Empire' refers to specimens between Lonavli (lat. 18° 70') and Igatpuri (lat. 19° 70') and records the sub-caudals as 7 to 12. The Fauna also refers to a specimen which agrees with the one from Mahableshwar in the presence of a brownish yellow stripe (extending to 3 scale rows) along each flank throughout the length of the body, as compared with a broken line of spots in others.

12 specimens have been examined, 9 in the Society's collections from Lonavla, Khandala, Igatpuri and Matheran—and without locality—and 3 from Khandala in the St. Xavier's College collection. All of them have 10 sub-caudals, and none the unbroken stripe on the sides.

At Dr. Malcolm Smith's suggestion the striped variety is hereby localized to Mahableshwar.

Mr. Humayun Abdulali who obtained this specimen states that it was caught alive, placed in a cardboard box and left in the boot of his car for a few hours and then found dead. In life it had a bright red tongue.

Mr. McCann (*J.B.N.H.S.*, 29, 1062, and *in episola*) also obtained several specimens at Mahableshwar, but these are not now traceable.

The overall length of the specimen—head to tip of tail—is 250 mm. (in spirit).

## LEPIDOSIS

I. *Costals*.

- |  |    |
|--|----|
| 1. Two headlengths behind the head ... | 15 |
| 2. Mid-body ...                        | 15 |
| 3. Two headlengths before the vent ... | 15 |

II. *Ventrals* . . . . . 121

III. *Anal* divided.

IV. *Sub-Caudals* . . . . . 13

BOMBAY,  
December 17, 1951.

V. K. CHARI  
Assistant Curator

## 26. APOSEMATIC BUTTERFLIES PROTECTED BY THE POISONOUS QUALITIES OF THEIR LARVAL FOOD-PLANTS

With reference to Mr. Wynter Blyth's remarks on this subject (1951, *Journ., Bomb. Nat. Hist. Soc.*, 50, 354), the late professor Poulton commented on this hypothesis, originally propounded by Haase, before the Entomological Society of London in 1916.

The late Professor stated that the hypothesis did not satisfy him and that whilst he thought it possible (but never definitely proved) that the distasteful and poisonous properties of the food plant might be utilised by the larva and retained in the imago, it was also possible for the insect itself to produce distasteful or poisonous juices in the laboratory of its own body.

He went on to say that whilst, amongst the examples quoted by Haase, the Danaidae feeding on Asclepiads and the *Pharmacophagus* (now *Polydorus*) Swallowtails feeding on Aristolochias were probably cases of the utilisation of this ready-made protection, the Heliconinae were not as the Passifloraceae, their food-plants, had been said to be without any poisonous properties by Dr. O. Stapf, F.R.S. A number of Acraeidae feed on Passifloraceae in the larval stage, and this is another well-protected group. Dr. Stapf was also quoted as saying that the Loranthaceae, the food-plants of *Delias* and *Mylothris*, had no acrid or poisonous qualities.

A little thought will bring to mind many examples of both poisonous and non-poisonous plants that are the common food-plant of the larvae of both aposematic and procrptic species, I use the term here with reference to the imago. A few examples will suffice. Oleander is eaten by *Euploea* (Danaidae and protected) and *Agathia* (Goemetridae and procrptic) and by *Deilephila nerii* (Sphingidae and procrptic). *Loranthus* spp. by *Delias* and *Mylothris* (both aposematic Pieridae), by several Lycaenids and by a number of procrptic Geometers. Castor by *Pericallia ricini* (aposematic Arctiidae) and by numerous procrptic Noctuidae and Geometridae. Strangely enough, although the Passifloraceae is stated to be non-poisonous, the three main groups feeding on it—the American Heliconines, the Oriental *Cethosia* and